Working Paper 2021/09

Analysis of climate change reporting in the public and private sectors

> MCGUINNESS INSTITUTE TE HONONGA WAKA

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1.0 Introduction

1.1 Purpose

The purpose of this working paper is to explore the extent of climate-related reporting in the annual reports of both public and private sector entities. The term 'climate-related reporting' refers to discussion of the behaviour of an entity in terms of climate change risks and initiatives and carbon emission metrics, costs, controls and targets in an annual report.

This working paper aims to contribute to a dialogue on how Aotearoa New Zealand might manage risks and maximise opportunities in the transition to a low-carbon economy. It is hoped that this work will be particularly useful given the recent passing (and attained Royal Assent) of the Financial Sector (Climaterelated Disclosures and Other Matters) Amendment Bill.

We hope this quantitative research provides useful data and insights that reinforce the decision to implement a mandatory (comply-or-explain) climate-related reporting regime in Aotearoa New Zealand. We also hope that this research (as well as its previous iterations) can be used to benchmark the progress of climate-related disclosures made by entities over the coming years.

1.2 Purpose of Project ReportingNZ

This working paper forms part of *Project ReportingNZ*, which aims to contribute to a discussion on how to build an informed society, with particular regard to the important role that entities play within society. When entities operate efficiently and with similar values to the communities in which they operate, they add value through employment, taxation revenue and by supporting community initiatives. However, entities can also present challenges if they do not reflect societal values or do not operate in a transparent manner. *Project ReportingNZ* looks specifically at the role of annual reports as a tool for improving the relationship between entities and the communities in which they operate. It also examines annual reports as one of the few mechanisms to collect readily available data on entities for use as an evidence base in policy development.

An underlying assumption of *Project ReportingNZ* is that New Zealand's reporting framework is no longer fit for purpose. Questions of what users of reports need to know, in what format and in what time frame, need to be explored and assessed regularly to ensure reports are timely, relevant, cost-effective and useful. The specific assumption underlying this working paper is that reporting on climate change is new, challenging and complex. As a result, all parties are required to work together to ensure that regulation, standards and guidelines work together to produce cost-effective, accessible, timely and comparable reports. The adage 'we manage what we measure' highlights that what is not measured is not managed. This working paper has been developed under the assumption that having a source of accessible, comparable and meaningful information gathered over an extended period of time creates a fundamental basis for informing public policy decisions.

This working paper follows on from previous *Project ReportingNZ* publications, which can be seen overleaf in Table 1.

Table 1: Selected previous *Project ReportingNZ* publications

Special topics	Research document	Data set
Topic 1: Attitudes (the	surveys)	
	Preparers' Survey: Attitudes of the CFOs of significant companies towards Extended External Reporting (published in collaboration with the XRB) (10 April - 3 July 2017)	92 responses from CFOs of NZSX-listed companies and companies listed on the 2016 Deloitte Top 200
	Users' Survey: Attitudes of interested parties towards Extended External Reporting (29 May - 21 August 2017)	104 responses from users of annual reports. The survey was open to the public and sent to a range of potentially interested parties including investors, industry organisations, NGOs and universities.
	Survey Insights: An analysis of the 2019 Task Force on Climate-related Financial Disclosures (TCFD) survey (December 2019)	63 responses from attendees of the Auckland and Wellington TCFD workshops (October 2019) and other interested parties.
Topic 2: Mandatory rep	porting framework	
	Working Paper 2018/01 - NZSX-listed Company Tables (March 2018)	NZSX-listed company annual reports 2016 [126]
	Working Paper 2018/04 - Legislation Shaping the Reporting Framework: A compilation (September 2018)	New Zealand legislation
	Working Paper 2020/03 - Reporting Requirements of Five Types of Entities (June 2020)	
	Working Paper 2020/02 - The Role of a Directors' Report: An analysis of the legislative requirements of selected Commonwealth countries (May 2020)	New Zealand legislation Australia legislation UK legislation Canada legislation
		Topic 2 also used data from the two working papers in Topic 3 (number of annual reports that are publicly available for eight different entities, see Topic 3 below).
Topic 3: Voluntary repo	orting frameworks	
	Working paper 2019/05 - Reviewing Voluntary Reporting Frameworks Mentioned in 2017 and 2018 annual reports (September 2019)	NZSX-listed company annual reports 2017 [126] 2018 [123] 2019 [120]
	Working Paper 2020/05 - Reviewing Voluntary Reporting Frameworks mentioned in 2019 Annual Reports (June 2020)	Deloitte Top 200 company annual reports 2017 [118] 2018 [161] 2019 [101]
	Working Paper 2021/13 - Reviewing Voluntary Reporting Frameworks mentioned in 2018 - 2020 Annual Reports (May 2021)	Government department annual reports 2017 [29] 2018 [30] 2019 [32]

Special topics	Research document	Data set
	cont.	Crown agents and Crown entities annual reports 2017 [63] 2018 [63] 2019 [57]
		District health board annual reports 2017 [20] 2018 [20] 2019 [20]
		Crown Research Institute annual reports 2017 [7] 2018[7] 2019 [7]
		Local authorities annual reports 2017 [78] 2018 [78] 2019 [78]
		State-owned enterprises annual reports 2017 [13] 2018 [12] 2019 [9]
Topic 4: Outstanding ann	ual report disclosure issues	
(1) Risks	Working Paper 2020/02 - The Role of a Directors' Report: An analysis of the legislative requirements of selected Commonwealth countries (May 2020) Legal Opinion 2020/01 - Obligations on directors to report risk in New Zealand annual reports under the Companies Act 1993 (May 2020)	
(2) Climate-related information	Working Paper 2018/03 - Analysis of Climate Change Reporting in the Public and Private Sectors (July 2018) Working Paper 2019/06 - Updated Analysis of Climate Change Reporting in the Public and Private Sectors (September 2019) Working Paper 2020/04 - Analysis of Climate Reporting in the Public and Private Sectors (June 2020) Legal Opinion 2020/01 - Obligations on directors to report risk in New Zealand annual reports under the Companies Act 1993 (May 2020) Working Paper 2021/12 - Analysis of Climate Reporting in the Public and Private Sectors (May 2021)	Crown agent and Crown entity annual reports 2017 [63] 2018 [63] 2019 [57] State-owned enterprise annual reports 2017 [13] 2018 [12] 2019 [9] Local authority annual reports 2017 [78] 2018 [78] 2019 [78] District health board annual reports 2017 [20] 2018 [20] 2019 [20] Crown Research Institute annual reports 2017 [7] 2018 [7] 2018 [7] 2019 [7] Deloitte Top 200 company annual reports 2017 [118] 2019 [101] Government department annual reports 2017 [29] 2018 [30] 2019 [32]

Special topics	Research document	Data set
(3) Gender and cultural representation	Working Paper 2018/01 - NZSX-listed Company Tables (March 2018) Research undertaken specifically for Report 17 looking at 2019 annual reports of NZSX-listed companies.	NZSX-listed company annual reports 2016 [126] 2019 [120]
(4) Health and safety	Working Paper 2018/01 - NZSX-listed Company Tables (March 2018) Research undertaken specifically for Report 17 looking at 2019 annual reports of NZSX-listed companies.	NZSX-listed company annual reports 2016 [126] 2019 [120]
(5) Political donations	Working Paper 2018/01 - NZSX-listed Company Tables (March 2018) Research undertaken specifically for <i>Report 17</i> looking at 2019 annual reports of NZSX-listed companies.	NZSX-listed company annual reports 2016 [126] 2019 [120]
(6) Tax paid in cash to the New Zealand government	Working Paper 2018/01 - NZSX-listed Company Tables Research undertaken specifically for <i>Report 17</i> looking at 2019 annual reports of NZSX-listed companies.	NZSX-listed company annual reports 2016 [126]
(7) Penalties	Nuplex v Auckland Regional Council (2003)	N/A
(8) Intangible assets	Research undertaken specifically for <i>Report 17</i> looking at 2017 annual reports of NZSX-listed companies.	Existing international research NZSX-listed company annual reports 2017 [126] 2019 [120]
Topic 5: Assurance		
	Working Paper 2018/01 - NZSX-listed Company Tables (March 2018)	NZSX-listed company annual reports 2016 [126]

2.0 Methodology

2.1 Data sets

The initial stage of this research was to define the data sets used for analysis and comparison. An overview of the data sets can be seen in Table 2 below.

Table 2: Data sets

Data sets	2020	
	No. of entities	No. of available annual reports
NZSX-listed companies	132	130
Deloitte Top 200 companies	200	170
State-owned enterprises	12	12
Crown agents and Crown entities	63	59
District health boards	20	20
Crown Research Institutes	7	7
Government departments	32	32
Local authorities	78	75
Total	544	505

Notes:

* DHBs and CRIs were treated as separate data sets rather than being included in the Crown agents and Crown entities data set.

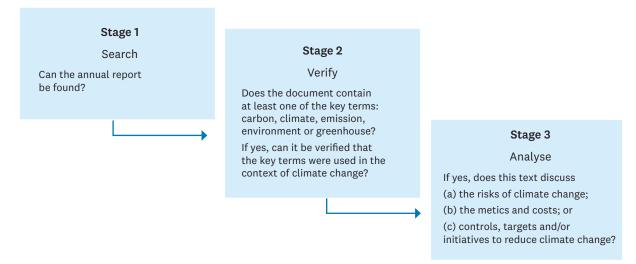
** The total figure does not represent individual entities. Some companies are NZSX listed as well as on the Deloitte Top 200. There are also entities that are both state-owned enterprises and listed on the Deloitte Top 200 and therefore have been double counted

*** The increased number of analysed annual reports (505 in 2020 compared with 377 in 2019) resulted from a methodological decision to include NZSX-listed companies in the data set. Trusts and funds were removed from the total number of entities listed on the NZSX. This was the result of a methodological decision to only include companies that contained the term 'Limited' in their title.

2.2 The standard methodology

The standard methodology for all data sets is summarised by Figure 1 and explained further below.





2.2.1 Stage 1: Search

Goal: Find copies of all annual reports.

To find a soft copy of each entity's annual report, the Companies Register was searched first and then, if required, the entity's website. If only financial statements (not annual reports) were found, they were included in the data set but excluded from Stage 2 onwards. Annual reports used for this analysis were taken from date of balance sheet, not date of publication. For example, an annual report that covered the period from 1 April 2016 to 31 March 2017 was included in the 2017 analysis but one that covered the period 1 January 2016 to 31 December 2016 was included in the 2016 analysis.

2.2.2 Stage 2: Verify

Goal: Establish whether the annual report includes the search terms and verify that the terms are used in the context of climate change.

Using the 'advanced search' function on Adobe Acrobat Pro, all annual reports from a single data set could be aggregated and searched collectively for the terms 'carbon', 'climate', 'emission', 'environment' and 'greenhouse'. For annual reports that were not searchable using the 'find' tool, text recognition software (also Adobe Acrobat Pro) was used. Annual reports that did not contain any of the five search terms were set aside. Reports were checked to ensure that those containing the search terms had used them in a context relevant to this research. For example, if an annual report only used the term 'climate' or 'environment' in reference to the 'economic climate/environment', and did not include any other relevant disclosures, the annual report did not proceed to the next stage of research.

2.2.3 Stage 3: Analyse

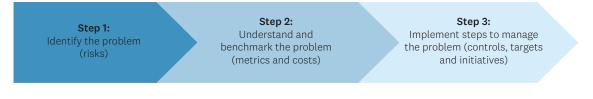
Goal: Analyse all the text containing the search terms.

In this stage, disclosures were grouped into one of the following climate information categories:

- 1. Climate change risks: Any possible impact that climate change may have on the future of the entity, country and/or world.
- 2. Emission metrics: Existing carbon emissions data stated in tonnes, percentages or CO2 /m2 produced and/or abated.
- 3. Emission costs: Existing carbon emission offsets stated in financial figures and/or the number of carbon units used (usually found in financial statements).
- 4. Emission controls: Reference to existing measures that were put in place to control or abate carbon emissions.
- 5. Emission targets: Specific goals to reduce future carbon emissions. Emission targets refer to a specific numerical value (in contrast to initiatives, which are broader and less specific).
- 6. Climate change initiatives: A statement, reference to an action, or similar that shows the entity is taking action or planning to take action to curb its emissions or reduce its vulnerability to climate change risks (or the vulnerability of a country or the world).

The categories were selected to represent the three steps of problem solving. Analysing disclosures of risk tells us, firstly, if the entity is identifying a problem. Analysing disclosures of metrics and costs tells us, secondly, what data the entity is collecting to understand and benchmark the problem. Analysing disclosures of controls, targets and initiatives tells us, finally, what the entity is doing to try and manage the problem. In the bar graphs, Step 1 is indicated with dark blue, Step 2 with medium blue and Step 3 with light blue, as in Figure 2 below.

Figure 2: Steps of problem solving



2.3 Collating the data

2.3.1 Stage 2 data

The results for each data set were recorded on separate sheets of an Excel workbook. Each sheet included a table of the 2020 annual reports published by each entity. Reviewers recorded whether or not an entity had mentioned one or more of the search terms in its 2020 reports, along with the page number(s) where the information was found.

2.3.2 Stage 3 data

Again, the results for each data set were recorded on separate sheets of an Excel workbook. Each sheet included a table of the 2020 annual reports published by each entity. Reviewers recorded whether or not the inclusion of the search terms were relevant in one or more of the climate information categories mentioned on the previous page. The relevant qualitative information was recorded along with the page number(s) where it was found.

2.4 Presenting the data

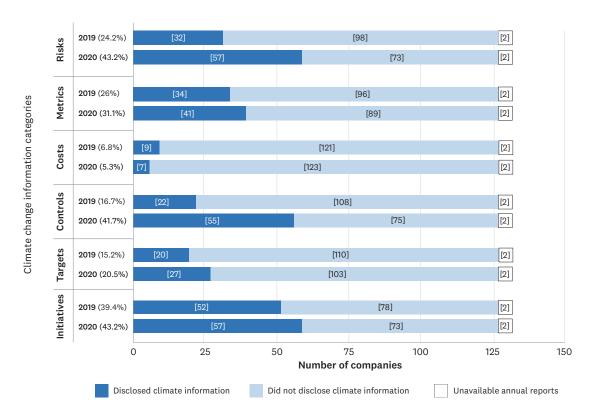
The final data is presented as a series of graphs in Section 3.0. Each graph represents the relevant data set containing information found within entities' respective 2020 annual reports. Disclosed climate information has been colour-coded to represent the category that it belongs to, as mentioned previously (see Figure 2 in Section 2.2.3). The lighter shades of these colours represent the annual reports that did not disclose climate-related information. Unavailable annual reports and financial statements are indicated in white.

3.0 Results

3.1 NZSX-listed companies [132]

Figure 3 illustrates the overall level of disclosure of climate-related information by category in publicly available 2020 annual reports of NZSX-listed companies.

Figure 3: NZSX-listed companies' disclosure of climate-related information by category



Source: See Appendix 1, p. 23.

3.2 Deloitte Top 200 companies [200]

Figure 4 illustrates the overall level of disclosure of climate-related information by category in publicly available 2020 annual reports of Deloitte Top 200 companies.

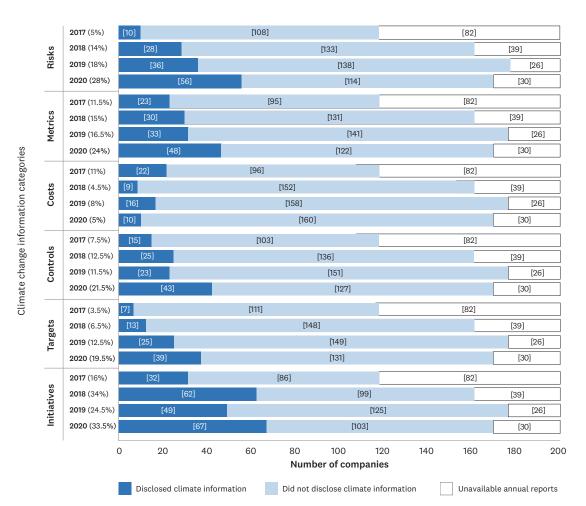


Figure 4: Deloitte Top 200 companies' disclosure of climate-related information by category

3.3 State-owned enterprises [14]

Figure 5 illustrates the overall level of disclosure of climate-related information by category in publicly available 2020 annual reports of state-owned enterprises.

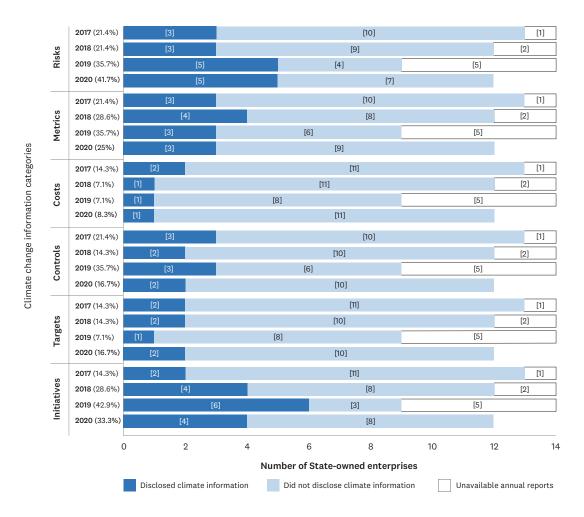
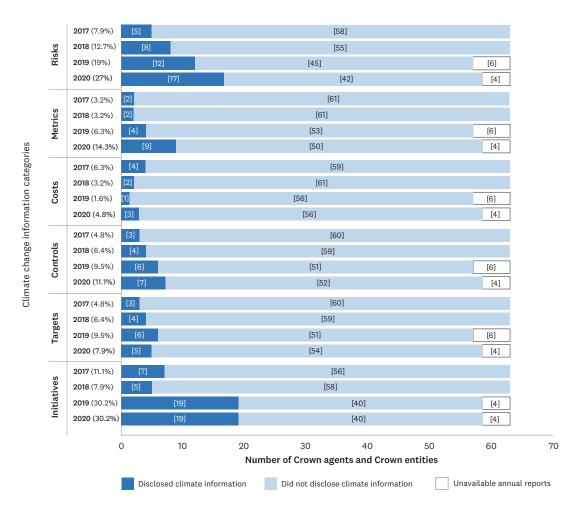


Figure 5: State-owned enterprises' disclosure of climate-related information by category

3.4 Crown agents and Crown entities [63]

Figure 6 illustrates the overall level of disclosure of climate-related information by category in publicly available 2020 annual reports of Crown agents and Crown entities.

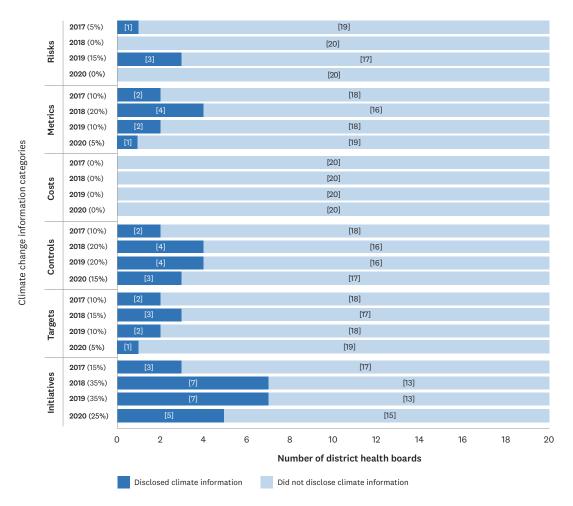




3.5 District health boards [20]

Figure 7 illustrates the overall level of disclosure of climate-related information by category in publicly available 2020 annual reports of district health boards.





3.6 Crown Research Institutes [7]

Figure 8 illustrates the overall level of disclosure of climate-related information by category in publicly available 2020 annual reports of Crown Research Institutes.

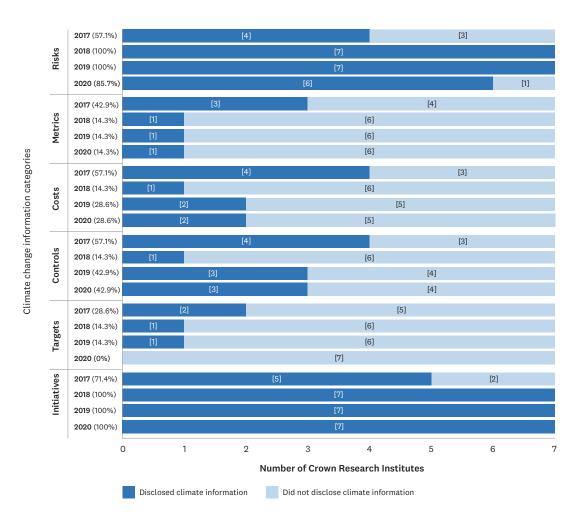


Figure 8: Crown Research Institutes' disclosure of climate-related information by category

3.7 Government departments [32]

Figure 9 illustrates the overall level of disclosure of climate-related information by category in publicly available 2020 annual reports of government departments.

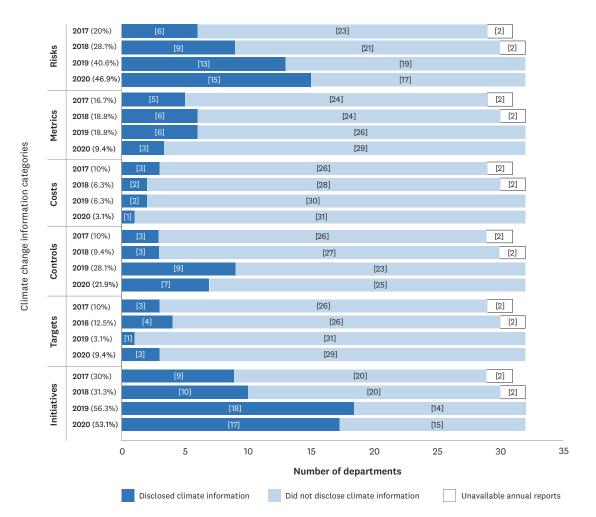


Figure 9: Government departments' disclosure of climate-related information by category

3.8 Local authorities [78]

Figure 10 illustrates the overall level of disclosure of climate-related information by category in publicly available 2020 annual reports of local authorities.

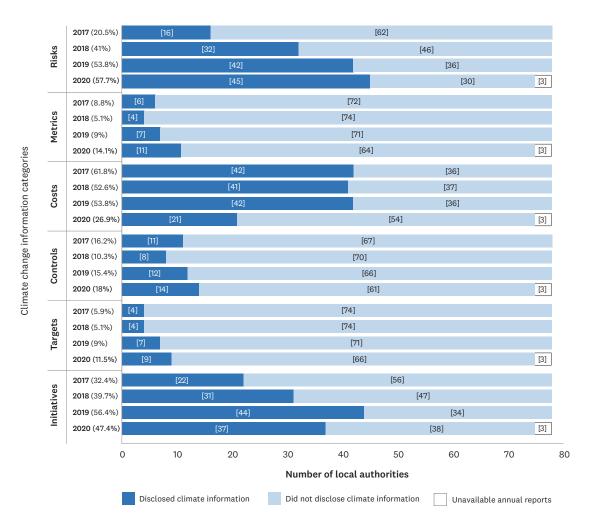


Figure 10: Government departments' disclosure of climate-related information by category

4.0 Observations

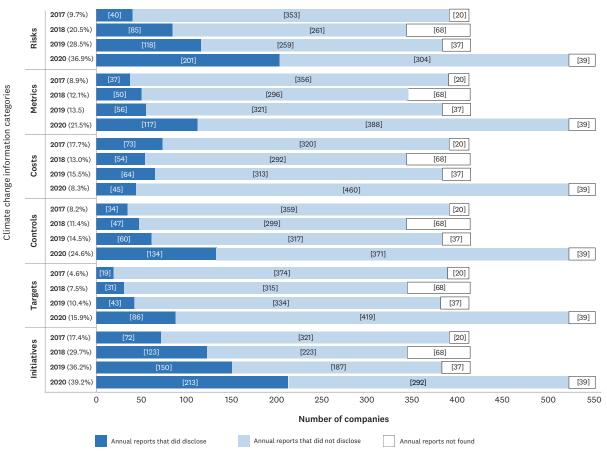
This section contains key observations about the data analysed in this research.

High level observations

Out of the 505 analysed 2020 annual reports, 221 (43.8%) did not disclose information for any of the six climate-related information categories: climate-related risks, emission metrics, emission costs, emission controls, emission targets and climate-related initiatives.

Figure 11 below illustrates the types of climate-related information disclosures made by the remaining 284 (56.2%) entities, indicated by the navy bars. While climate-related disclosures have increased since this research began in 2018, there is still plenty of room for improvement.

Figure 11: Overview comparison of the uptake of climate-related information in the annual reports of eight types of entities between 2017 and 2020



Notes:

1. A set of financial statements on its own does not meet the definition of an annual report (see s 211 of the Companies Act 1993).

2. The percentages in round brackets refer to the percentage of actual disclosed climate-related information against the number of possible annual reports. This means in Row 1, for example, 40 divided by 413 equals 9.7%.

3. The numbers in square brackets refer to the number of annual reports (including those that disclosed, did not disclose and were unavailable).

4. Disclaimer: When interpreting these results, it should be kept in mind that a very low threshold was applied when deciding whether information constituted climate-related information or not.

5. The increased number of analysed annual reports (505 in 2020 compared with 377 in 2019) resulted from a methodological decision to include NZSX-listed companies in the data set. Trusts and funds were removed from the total number of entities listed on the NZSX. This was the result of a methodological decision to only include companies that contained the term 'Limited' in their title.

General observations

- More entities are making climate-related disclosures. Approximately 6.6% (56.2% 49.6% = 6.6%) more entities are reporting climate-related information in their 2020 annual reports (56.2%) than in their 2019 annual reports (49.6%).
- The most disclosed climate information category in 2020 annual reports was climate-related initiatives (39.2%). The percentage of initiatives disclosed in 2020 annual reports (39.2%) had increased significantly from previous years (36.2% in 2019, 29.7% in 2018, and 17.4% in 2017).
- Climate-related risks (36.9%) was the second most disclosed climate information category in 2020 annual reports. The disclosure of risks increased significantly in 2020 (36.9%) compared to 28.5% in 2019, 20.5% in 2018, and 9.7% in 2017.
- Disclosure of emission costs have decreased since 2017 (8.3% in 2020 compared with 15.5% in 2019, 13.0% in 2018, and 17.7% in 2017).
- There was an overall increase in disclosures across all climate information categories expect for emission costs. Disclosures of emissions controls saw the highest percentage increase of any category an increase of 10% from 2019 annual reports.

Specific observations

NZSX-listed companies:

As a large representative of the private sector within this research, NZSX-listed companies had a high number of individual cases of disclosed information. Climate-related disclosures (at varying degrees) had been made by 72 out of 132 (54.5%) NZSX-listed companies. There has been an increase in five climate information categories and a decrease in one category compared to the 2019 data set.

Categories where disclosure has increased:

- Controls (41.7%), up 25% from 2019 annual reports;
- Risks (43.2%), up 19% from 2019 annual reports;
- Metrics (31.1%), up 5.1% from 2019 annual reports;
- Initiatives (43.2%), up 3.8% from 2019 annual reports; and
- Targets (20.5%), up 5.3% from 2019 annual reports.

Categories where disclosure has decreased:

• Costs (5.3%), down 1.5% from 2019 annual reports.

The greater level of disclosed information observed is likely due to the larger size of the data set, but also as a result of greater reporting requirements. The Institute expects that disclosures from the private sector will continue to increase as a result of the passing of the Financial Sector (Climate-related Disclosures and Other Matters) Amendment Bill.

Disclosure of information by number of categories mentioned:

Twelve entities made disclosures that contained climate-related information for all six categories (for comparison, six entities in 2019 annual reports and four in 2018 annual reports made all six disclosures). The entities that published 2020 annual reports that disclosed information over all six categories are:

- 1. Contact Energy Limited (Deloitte Top 200 and NZSX-listed company)
- 2. F&P Healthcare (Deloitte Top 200 and NZSX-listed company)

- 3. Genesis Energy Limited (Deloitte Top 200 and NZSX-listed company)
- 4. SkyCity Limited (Deloitte Top 200 and NZSX-listed company)
- 5. Z Energy Limited (Deloitte Top 200 and NZSX-listed company)
- 6. A2 Milk Limited (Deloitte Top 200 and NZSX-listed company)
- 7. New Zealand Refining Limited (NZSX-listed company)
- 8. Ministry of Transport (government department)
- 9. Dunedin City Council (local authority)
- 10. Wellington City Council (local authority)
- 11. Energy Efficiency and Conservation Authority (Crown agent/entity)
- 12. Guardians of New Zealand Superannuation (Crown agent/entity)

The operations of private sector entities such as A2 Milk, Contact Energy, Genesis Energy, New Zealand Refining and Z Energy rely heavily upon natural resources, are impacted by climate change, and are also to the detriment of the environment. Such entities, therefore, have both a vulnerability to and an impact on climate change. Entities that operate in climate-vulnerable industries would be expected to have higher levels of disclosed climate-related information. Shareholder awareness, expectation and demand for climate-related disclosures are the likely driving forces behind the observed increases of disclosures across the private sector.

Alternatively, as representatives of the public sector, the disclosures made by Dunedin City Council, Energy Efficiency and Conservation Authority, Guardians of New Zealand Superannuation and Wellington City Council aim to inform a diverse range of stakeholders on a wider range of impacts. An interesting distinction to note is the difference of scope that climate-related disclosures take between the private and public sectors.

Appendix 1: NZSX-listed companies by mentions of climate-related information in 2019 and 2020 annual reports

Notes:

N/A(1) means that a company was not listed on the NZX Main Board that year.

N/A(2) means that a company was listed on the NZX Main Board that year, but that an annual report was not found (see Section 2.2, p. 6)

		Diolog	Motuloo		Cooto Cooto	4		Contuclo	- F	at a t	Laitin	Initiation
NTSX-listad company	2	2	Mer	3	- ۲	3			ษ	Iargers		Inves
	2019	2020	2019	2020	2019	2020	2019	2020	2019	2020	2019	2020
Abano Limited		N/A(1)		N/A(1)		N/A(1)		N/A(1)		N/A(1)		N/A(1)
Ascension Capital Limited	N/A(1)		(1)A(1)		N/A(1)		(L) A/N		N/A(1)		N/A(1)	
AFC Group Holdings Limited												
Australian Foundation Investment Company Limited												
AFT Pharmaceuticals Limited												
Auckland International Airport Limited		>	>					>	>		>	
Air NZ Limited	>	>		>				>		>	>	>
Allied Farmers Limited	>	>										
AMP Limited	>		>						>		>	
Australia and New Zealand Banking Group Limited	>	>	>	>			>	>	>	>	>	>
Aorere Resources Limited		(1)A(1)		N/A(1)		N/A(1)		N/A(1)		(1)A(1)		(L)A(1)
Asset Plus Limited												>
Arborgen Holdings Limited		>										>
Argosy Property Limited											>	>
Arvida Group Limited		>		>				>				>
The a2 Milk Company Limited	>	>	>	>		>		>	>	>	>	>
Augusta Capital Limited		N/A(1)		N/A(1)		N/A(1)		(1)A(1)		(I)A(I)		N/A(1)
AWF Madison Limited												
Burger Fuel Group Limited												
Blackwell Global Holdings Limited												
Briscoe Group Limited								>				>
Blis Technologies Limited												>
Barramundi Limited												
Cavalier Corporation Limited											>	>
Cannasouth Limited								>				
CDL Investments New Zealand Limited												
Contact Energy Limited	>	>	>	>	>	>	>	>	>	>	>	>
Cooks Global Foods Limited												
The Colonial Motors Company Limited		>										
Chorus Limited	>	>	>	>			>	>		>	>	>
Chatham Rock Phosphate Limited												

	Ris	Risks	Metrics	rics	õ	Costs	Cont	Controls	Tar	Targets	Initiatives	tives
NZSX-listed company	2019	2020	2019	2020	2019	2020	2019	2020	2019	2020	2019	2020
CSM Group Limited												
Comvita Limited		>	>	>			>	>			>	>
Delegat Group Limited		>						>			>	>
Downer EDI Limited	>	>						>	>	>	>	>
Ebos Group Limited							>				>	>
Enprise Group Limited												
EROAD Limited								>			>	>
Evolve Education Group Limited												
Fletcher Building Limited	>	>	>	>			>	>	>	>	>	>
Finzsoft Solutions Limited		N/A(1)		(1)A(1)		N/A(1)		N/A(1)		(1)A(1)		N/A(1)
Fisher & Paykel Healthcare Corporation Limited		>	>	>		>	>	>	>	>	>	>
Freightways Limited		>	>	>				>			>	>
Foley Wines Limited		>					>	>				>
General Capital Limited												
Geo Limited												
Geneva Finance Limited												
Genesis Energy Limited	>	>	>	>	>	>		>		>	>	>
Good Spirits Hospitality Limited												
Gentrack Group Limited												
Green Cross Health Limited												
Henderson Far East Income Limited			>									
Heartland Group Holdings Limited		>		>				>			>	>
Hallenstein Glasson Holdings Limited		>										>
Harmoney Corp Limited	N/A(1)		(1)A(1)		(I)A(I)		(1) A/N		N/A(1)		N/A(1)	
Infratil Limited		>								>		>
ikeGPS Group Limited												
Investore Property Limited	>	>						>				
Just Life Group Limited												
Kingfish Limited												
Kathmandu Holdings Limited												
Kiwi Property Group Limited		>	>	>				>	>		>	

	Risks	ks	Metrics	rics	ő	Costs	Cont	Controls	Tar	Targets	Initiatives	tives
NZSX-listed company	2019	2020	2019	2020	2019	2020	2019	2020	2019	2020	2019	2020
Livestock Improvement Corporation Limited	>	>	>		>			>			>	>
Millenium Copthorne Hotels New Zealand Limited												
Mercury NZ Limited	>	>	>	>	>		>	>			>	>
Meridian Energy Limited	>	>	>	>				>	>	>	>	>
Metlifecare Limited		N/A(1)		N/A(1)		N/A(1)		(1)A/N		N/A(1)		(L)A(I)
Mainfreight Limited		>		>				>			>	>
Mercer Group Limited		(1)A(1)		(I)A(1)		(1)A(1)		(I)A(I)		(1)A(1)		(L)A(I)
Michael Hill International Limited											>	
MHM Automation Limited	(I)A(1)		(I)A(1)		N/A(1)		(1) A(1)		N/A(1)		N/A(1)	
Marlin Global Limited												
Marsden Maritime Holdings Limited												
Moa Group Limited												
Metro Performance Glass Limited												
Marlborough Wine Estates Group Limited												
Napier Port Holdings Limited	>	>	>					>		>	>	>
New Talisman Gold Mines Limited												
NZ Windfarms Limited												
New Zealand King Salmon Investments Limited	>	>	>	>			>	>			>	>
New Zealand Rural Land Company Limited						N/A(2)	(2)					
NZME Limited		>		>			>	>			>	>
New Zealand Oil & Gas Limited		>		>	>			>			>	>
The New Zealand Refining Company Limited	>	>	>	>	>	>		>		>	>	>
NZX Limited		>		>			>	>			>	>
Oceania Healthcare Limited								>				>
Precinct Properties New Zealand Limited	>	>		>				>		>	>	>
Pacific Edge Limited												
Property for Industry Limited		>	>	>				>				>
PGG Wrightson Limited		>										
Promisia Healthcare Limited												
Plexure Group Limited												
Port of Tauranga Limited	>	>		>				>	>	>	>	>

	, Bia	Risks	Met	Metrics	Costs	,ts	Con	Controls	Tars	Tarøets	Initia	Initiatives
NZSX-listed company												
	2019	2020	2019	2020	2019	2020	2019	2020	2019	2020	2019	2020
Pushpay Holdings Limited												
PaySauce Limited												
QEX Logistics Limited												
Radius Residential Care Limited	N/A(1)		(1)A(1)		N/A(1)		(1) A/N		N/A(1)		N/A(1)	
Rakon Limited												
Restaurant Brands New Zealand Limited												>
Rua Bioscience Limited	(1)A/N		(1)A(1)		N/A(1)		(L) A(1)		N/A(1)		N/A(1)	
Ryman Healthcare Limited								>			>	
Sanford Limited	>	>	>	>			>	>	>	>	>	>
Scales Corporation Limited	>	>	>	>				>			>	>
Scott Technology Limited												
Smiths City Group Limited		N/A(2)		N/A(2)		N/A(2)		N/A(2)		N/A(2)		N/A(2)
Solution Dynamics Limited												
SeaDragon Marine Oils Limited		N/A(1)		(1)A(1)		N/A(1)		N/A(1)		(I)A(I)		(1)A(1)
Seeka Limited	>	>						>		>	>	>
SkyCity Entertainment Group Limited	>	>	>	>		>	>	>	>	>	>	>
Skellerup Holdings Limited				>				>		>		
Serko Limited												
Sky Network Television Limited												
Synlait Milk Limited	>	>	>		>		>	>	>	>	>	
SMW Group Limited	N/A(1)		N/A(1)		N/A(1)		N/A(1)		N/A(1)		N/A(1)	
Southern Charter Financial Group Limited												
Snakk Media Limited												
Stride Property Limited & Stride Investment Management Limited	>	>						>				>
Spark New Zealand Limited	>	>	>	>				>	>	>	>	>
South Port New Zealand Limited		>	>	>				>			>	>
Smartpay Holdings Limited												
Steel and Tube Holdings Limited				>				>				>
Summerset Group Holdings Limited	>	>	>	>			>	>		>	>	>
Third Age Health Services Limited	(1)A(1)		N/A(1)		N/A(1)		N/A(1)		N/A(1)		N/A(1)	
T&G Global Limited		>	>	>			>	>	>	>	>	>

NZSX-listed company20192020Tourism Holdings Limited~~~TulL Logistics Limited~~~Telstra Corporation Limited~~~Telstra Corporation Limited~~~Tilt Renewables Limited~~~Trustpower Limited~~~Turners Automotive Group Limited~~~Turners Automotive Group Limited~~~Trustpower LimitedTrustpower Limited~~Turners Automotive Group Limited~~~Trustreen Group Limited~~~Trustreen Group Limited~~~Trustreen Group Limited~~~Tower Limited~~~Tower Limited~~~		2019									
ed * * *	<u> </u>		2020	2019	2020	2019	2020	2019	2020	2019	2020
imited	> `	>				>	>	>		>	>
imited	`		>							>	
p Limited	>	>	>				>		>	>	>
p Limited	>	>	>			>			>	>	
p Limited	>		>				>			>	>
											>
TruScreen Group Limited Tower Limited	N/A(1)	2	(1)A(1)		N/A(1)		(1)A(1)		(1)A(1)		(L)A(I)
Tower Limited											
											>
Vector Limited	>	>	>			>	>			>	
Vista Group International Limited	>						>				
Vital Limited											
Westpac Banking Corporation	>	>	>					>		>	
Wellington Drive Technologies Limited											
The Warehouse Group Limited	>		>	>		>	>	>	>	>	>
Z Energy Limited	>	>	>	>	>	>	>	>	>	>	>
Total 32 57	57	34	41	ი	7	22	55	20	27	52	57
Out of 132	132	132	132	132	132	132	132	132	132	132	132
Percentage total 24.2% 43.2%	43.2%	26%	31.1%	6.8%	5.3%	16.7%	41.7%	15.2%	20.5%	39.4%	43.2%

Appendix 2: Examples of best practice across climate information categories

1. Climate change risks (Z Energy Annual Report 2020, p. 6)1



	We are committed to under environmental imp	-		-	ig the
	Today, significant activity is underway around the world, with organisations in both the private and public sectors seeking to	GHG EMISSIONS I	DATA SUMMA	RY BY SCOF	PE (TCO ₂ E)
	reduce or eliminate their carbon emissions. Our own government's aspiration is for New Zealand to be carbon		2019/20	2018/19	2017/18
	neutral by 2050.	Scope 1	0	0	0
	As a responsible investor, we strive to integrate environmental	Scope 2	13t	14t	19t
	concerns into our wider activities as an investment manager and hold ourselves accountable to the same guidelines. The	Scope 3	1,604t	1,954t	2,157t
	biggest potential impact we can make is in our investment portfolio through our engagement with the organisations we invest in. See the Responsible Investment Report that begins	Total gross emissions	1,617t	1,968t	2,175t
	on page 58 for more information. Our environmental performance falls under the remit of the Health, Safety, Security and Environment (HSSE) Committee. This Committee aims to improve staff awareness about the	Direct emissions (sources that are ow produce no scope	vned or control		
	environmental impact of our activities and sets achievable targets for minimising this impact.	Indirect emissions arising from the ge or heat consumed	neration of imp	orted (purch	
	In 2018, as recommended by the HSSE, we introduced a new natural environment statement and accompanying schedule into our Human Resources Policy. The statement outlines our commitment to understanding and managing the environmental impact of our activities in an effort to safeguard the statement of the sta	Indirect emissions occur as a consequ occur from sources our largest source o	ence of the act not owned or c	ivities of the ontrolled by u	Guardians, but us. This includes
	our natural environment. As all staff must complete regular policy attestations, the addition of the statement both further ingrains our commitment to the environment into our operations and keeps our environmental impact at the	GHG Emissions Sun 3,000 –	nmary 2013 - 20	20	
	forefront of our team's minds.				
	The measures set out in this section are the greenhouse gas emissions for the corporate operations of the Guardians. They have been calculated in accordance with the ISO 14064-1:2006 GHG accounting standard, and verified by Toitū Envirocare. A verification report is available on our website here: www.nzsuperfund.nz/performance/best-practice/. When evaluating our environmental performance, Toitū Envirocare look at our emissions relative to our staff numbers, net asset value and turnover.	2,000 o 1,000			
		0		6 ¹¹ 2011 ¹¹⁸ 2017	318 ¹¹⁹ 2019 ¹²⁰
103 - 1 103 - 2 103 - 3 305 - 1 205 - 2					
305 - 2 305 - 3					

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29 Intangible assets

	COR	CORE COUNCIL		CONSOLIDATED		
	Actual 2020 \$000	Actual 2019 \$000	Actual 2020 \$000	Actual 2019 \$000		
Opening cost	11,034	9,454	17,153	15,650		
Additional intangible assets	2,282	1,580	4,554	1,977		
Transfers	-	-	1,972	-		
Disposals	-	-	(301)	(474)		
Carbon credits surrendered	(16)	-	(16)	-		
Closing cost	13,300	11,034	23,362	17,153		
Accumulated amortisation opening balance	8,826	7,986	14,046	13,008		
Impairments	-	-	-	-		
Disposals	-	-	(300)	(385)		
Transfers	-	-	101	-		
Amortisation	913	840	1,882	1,423		
Accumulated amortisation closing balance	9,739	8,826	15,729	14,046		
Work in progress	1,362	1,187	1,362	1,239		
Net book value	4,923	3,395	8,995	4,346		
Computer intangibles	4,917	3,373	8,989	4,324		
Carbon credits	6	22	6	22		
	4,923	3,395	8,995	4,346		

During 2013 the Dunedin City Council as owner of land with pre 1989 forests on that land was entitled to carbon credits (NZU's). These have been acquired and have been banked, held to be offset against expected future carbon liabilities from the operation of the landfill. Further NZU's have been acquired on the open market and are also held to offset expected future carbon liabilities.

Relevant significant accounting policies

Goodwill represents the excess of the purchase consideration over the fair value of the net tangible and identifiable intangible assets, acquired at the time of acquisition of a business or an equity interest in a subsidiary or associate company. Goodwill is tested annually for impairment.

Software is recognised at cost and amortised to the surplus or deficit on a straight line basis over the estimated useful life, which is a maximum period of five years.

Carbon credits purchased are recognised at cost on acquisition. Free carbon credits received from the Crown are recognised at fair value on receipt. They are not amortised, but are instead tested for impairment annually. They are derecognised when they are used to satisfy carbon emission obligations.

skycity

New Zealand sites become carbon neutral by 30 September 2019, with SkyCity's Adelaide site achieving carbon neutrality by 30 September 2020. As part of this strategy, a SkyCity Green Fund was established - funded by an internal carbon levy paid by each of SkyCity's Auckland, Hamilton, Queenstown and Adelaide sites relative to each site's emissions. The levy is an internal charge of \$25 per tonne of carbon, in line with the New Zealand Government's price of carbon under the Emissions Trading Scheme. Funds from the levy are used to offset SkyCity's carbon footprint to net zero by investing in emission reduction projects selected by Toitū Envirocare. The SkyCity Green Fund also accrues and invests in projects identified and developed by SkyCity employees to reduce SkyCity's carbon emissions in accordance with its

SkyCity employees have the opportunity to measure and offset their own household carbon footprints, with SkyCity matching their offset dollar-for-dollar by payment into the SkyCity Green Fund.

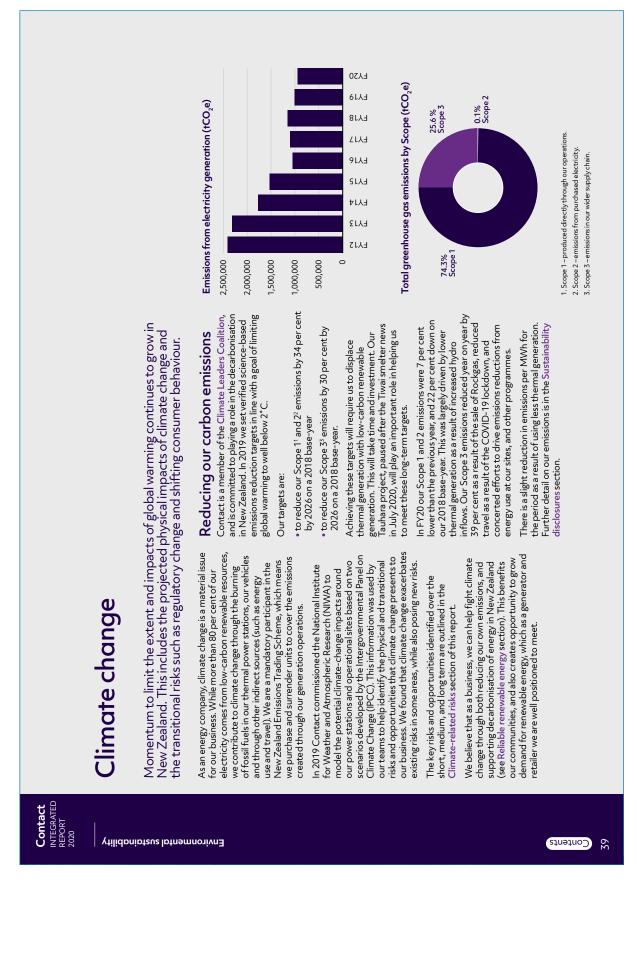
Pleasingly, SkyCity was among the first major New Zealand companies to go carbon neutral

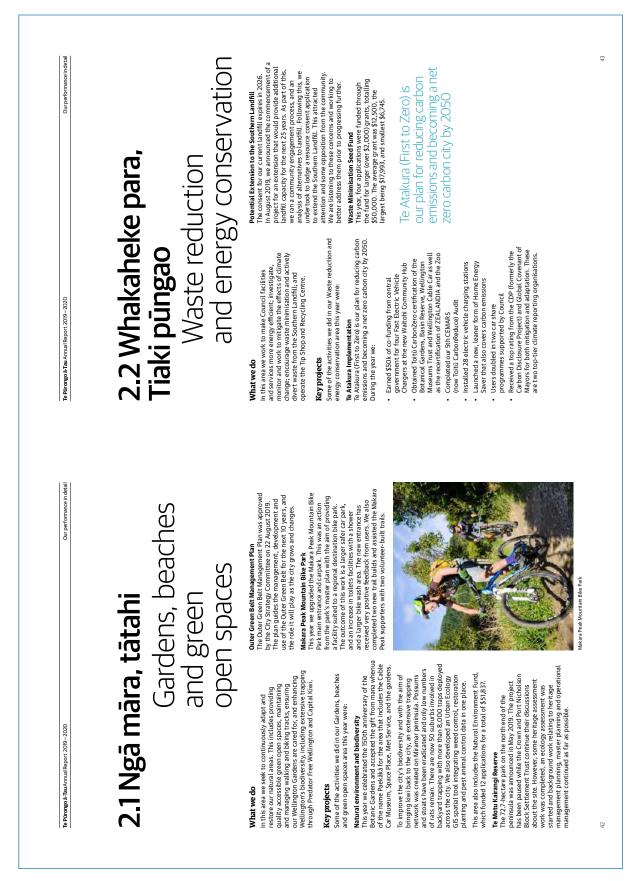
science-based targets set in 2019.

and was certified carbonzero by Toitū Envirocare in New Zealand in October 2019. SkyCity paid \$86,000 to offset the equivalent of 12,866 tonnes of carbon (measured in FV19). The carbon credits purchased through Toitū Envirocare are generated by international projects, which will fund 48,000 solar household cookers for rural communities in China and help build wind farm capacity in India to replace fossil fuel alternatives.

The New Zealand International Convention Centre, currently under development in Auckland, will operate as a carbon neutral venue following completion of construction and is expected to be the only one of its kind in the Asia Pacific region. The New Zealand International Convention Centre has also adopted a sustainability management plan and will participate in globally recognised, independent verification programmes, including the Leadership in Energy and Environmental Design's (LEED) Green Building Rating System. The New Zealand International Convention Centre aims to achieve a certified status following the assessment of the sustainable nature by which the centre has been designed, built and delivered.







Endnotes

- 1 Z Energy Limited. (2020). Z Energy Annual Report 2020. NL: Author. Retrieved 2 November 2021 from <u>https://investors.z.co.nz/financials/annual-reports</u>.
- 2 Guardians of New Zealand Superannuation. (2020). Guardians of New Zealand Superannuation Annual Report 2020. NL: Author. Retrieved 2 November 2021 from <u>https://www.nzsuperfund.nz/</u> publications/annual-reports.
- 3 Dunedin City Council. (2020). Dunedin City Council 2019/2020 Annual Report. NL: Author. Retrieved 2 November 2021 from <u>https://www.dunedin.govt.nz/council/annual-reports/annual-reports-2019-2020</u>.
- 4 SkyCity Limited. (2020). SkyCity Limited 2020 Annual Report. NL: Author. Retrieved 2 November 2021 from https://www.skycityentertainmentgroup.com/media-centre/2020-annual-report.
- 5 Contact Energy Limited. (2020). Integrated Annual Report 2020. NL: Author. Retrieved 2 November 2021 from <u>https://contact.co.nz/aboutus/investor-centre/reports-and-presentations#Annual-and-half-year-reports</u>.
- 6 Wellington City Council Te Pūrongo ā-Tau. (2020). Wellington City Council Te Pūrongo ā-Tau 2019/2020 Annual Report. NL: Author. Retrieved 2 November 2021 from <u>https://wellington.govt.</u> <u>nz/your-council/plans-policies-and-bylaws/plans-and-reports/annual-report.</u>

